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(21) International Application Number: PCT/US99/23443 (22) International Filing Date: 7 October 1999 (07.10.99) (30) Priority Data: 09/168,526 8 October 1998 (08.10.98) US (71) Applicant: CALBIOCHEM NOVABIOCHEM CORPORATION [US/US]; 10394 Pacific Center Court, San Diego, CA 92121 (US). (72) Inventors: JOYCE, Alison; 24 Rollins Street, Groveland, MA 01834 (US). WINCHELL, Lisa, F.; 447 Chapman Street, Canton, MA 02031 (US). DEMEO, Laura; 25 Boston Avenue, Somerville, MA 02144 (US). PROVUNCHER, Gail; 1 Dena Drive, Franklin, MA 02038 (US). MILLER, Thomas, E.; 246 Leyden Street, East Boston, MA 02128 (US). SORENSEN, Craig, M.; 131 Sumner Road, Boston, MA 02446 (US). HILL, David, E.; 85 Ridge Street, Arlington, MA 02474 (US). (74) Agent: EISENSTEIN, Ronald, I.; Nixon Peabody LLP, 101 Federal Street, Boston, MA 02110 (US).		(81) Designated States: AU, CA, JP, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: DIAGNOSTIC ASSAY FOR MATRIX METALLOPROTEINASE 9 AND USE THEREOF (57) Abstract The present invention employs an improved immunoassay that detects all forms of MMP-9 (both the form complexed with TIMP and the "free" uncomplexed form) in biological samples including human serum and plasma. Using this immunoassay the present inventors have surprisingly discovered that a much higher degree of detection and quantification is possible than with prior assays. The assay is preferably a capture assay using two antibodies to MMP-9 that do not compete with each other (i.e., bind to distinct epitopes). The epitopes that are bound to must be exposed in both the complexed MMP-9 as well as the free MMP-9.		